

# TECHNOLOGY @ ROCKY FLATS

## *Temporary Structures for Remediation of High-Contamination Areas*

The driver for using temporary structures during the soil remediation was the need to cost-effectively provide environmental controls during removal of plutonium-contaminated soil and address stakeholder concern about windborne dispersion. One example was using movable structures during the remediation of the 903 Pad. The remediated area had become contaminated in the 1950s from plutonium-containing solvents leaking from drums stored outside. The contaminated soil was relatively near the surface of an area subject to high winds. The remediation project purchased movable sprung structures (tents) large enough to enclose operating construction equipment and a staging area for intermodal waste containers, but small enough to be moved progressively across an area of contaminated soil without disassembly. Additionally, the structures provided better control for soil characterization and higher worker comfort and productivity during inclement weather.

A larger sprung structure was used to remediate buried drums of uranium machining waste in the T-1 Trench project. This was the initial remediation of this kind of material at Rocky Flats and the Site and some of its stakeholders were unsure of the airborne releases that would occur from this kind of work. The structure was large enough to cover the whole trench and provide logistic area (approximately one-third acre).

In retrospect the approach of using structures was useful in protecting workers from inclement weather and as a means of reassuring a skeptical public. However, the structures were not justifiable as a contamination control mechanism, since the airborne levels emitted by the Rocky Flats remediation activities were never enough to cause contamination of adjacent areas or detectable levels of airborne contamination.